

CLAIMS

1. A method of using, in a circuit system which is designed to operate with a first integrated-circuit device operating at a first supply voltage, a second integrated-circuit device functionally equivalent to the first integrated-circuit device and comprising at least a portion operating at a second supply voltage lower than the first supply voltage, comprising:

providing, in the circuit system, a plurality of areas for connection to corresponding terminals of the first integrated-circuit device or of the second integrated-circuit device, two of these areas, which correspond to the supply terminals of one or of the other of the integrated-circuit devices, being connected to the first voltage supply, and a third area, which corresponds to another terminal of one or of the other of the integrated-circuited devices, being connected to circuit means of the circuit system,

forming, in the first integrated-circuit device, a direct electrical connection between the said other terminal and one of the terminals connected to the first voltage supply, and

forming, in the second integrated-circuit device, a voltage-reducer circuit with regulator the output of which is connected to the said other terminal.

2. A circuit system comprising:

a voltage supply;

an integrated-circuit device having a plurality of terminals of which two are connected to the voltage supply, wherein the integrated-circuit device is one of a family of functionally equivalent devices that comprises a first-generation integrated-circuit device operating at the supply voltage; and

at least one subsequent-generation integrated-circuit device at least a portion of which operates at a voltage lower than the supply voltage, the first-generation device having a direct electrical connection between one of the terminals connected to the supply and another terminal of the plurality of terminals, and the subsequent-generation device comprising a

voltage-reducer circuit with regulator (RG) the output of which is connected to the said other terminal.

3. A circuit system according to Claim 2, comprising capacitive means external to the integrated-circuit device and connected between the said other terminal and one of the terminals connected to the supply.

4. A method comprising:

affixing a first integrated circuit requiring a voltage supply of a first value to a printed circuit board, where the printed circuit board is configured to receive a second integrated circuit and provide the second integrated circuit with a voltage supply of a second value and wherein the second value is greater than the first value;

providing a voltage supply of the second value to the first integrated circuit; and

converting the voltage supply of the second value to a value equal to the voltage supply of the first value using a voltage regulator integrated into the first integrated circuit.

5. The method of claim 4, wherein the first and second integrated circuits are functionally identical.

6. A device comprising:

a printed circuit board configured to receive a first integrated circuit device and supply the integrated circuit device with a voltage supply of a first value;

a second integrated circuit device, functionally identical to the first integrated circuit device, configured to require a voltage supply of a second value, where the second value is lower than the first value, affixed to the printed circuit board in place of the first integrated circuit device; and

a voltage reducer circuit, integrated within the second integrated circuit device, having a voltage input connected to the voltage supply of the first value, and having a voltage output, provided to the second integrated circuit device, of the second value.

7. The device of claim 6, further comprising capacitive means between the voltage output and a circuit ground common to the second integrated circuit device and the printed circuit board.

8. The device of claim 7 wherein:
the printed circuit board comprises a plurality of contact pads;
the second integrated circuit device comprises a plurality of terminal pins;
each of the plurality of terminal pins is in electrical contact with one of the plurality of contact pads;
the voltage input of the voltage reducer circuit is connected to the voltage supply of the printed circuit board via one of the plurality of terminal pins and one of the plurality of contact pads;
the output of the voltage reducer circuit is connected to the capacitive means via a second one of the plurality of terminal pins, and a second one of the plurality of contact pads;
and
the circuit ground of the integrated circuit device is connected to the circuit ground of the printed circuit board via a third one of the plurality of terminal pins, and a third one of the plurality of contact pads.